

REMARKS

Applicants request favorable reconsideration of this application in view of the foregoing amendments and the following remarks. Of claims 1-19 that were pending in the application, claims 5-16 remain withdrawn from consideration and claims 1-4 and 16-19 were rejected in the Office Action. By way of this amendment, Applicants have amended claims 1, 2, and 16-19 and, therefore, claims 1-4 and 16-19 remain pending for further consideration.

1. Prior Art Rejections of Claims 1-4 and 16-19

Under 35 U.S.C. § 102(b), the Examiner rejected: (a) claims 1-4 as allegedly being anticipated by U.S. Patent No. 5,743,571 (“Gaitros”); and (b) claims 16-19 as allegedly being anticipated by U.S. Patent No. 5,596,881 (“Wilson”). For at least the following reasons, Applicants respectfully traverse both of these rejections.

A. Claims 1-4

As amended herein, claim 1 recites a connecting structure. The connecting structure includes, among other possible things (*italic and underline emphasis added*):

- a first member; and
- a second member,
- wherein the first member has a peripheral wall portion that includes an outer end face and a stepped portion engaged with the second member,
- wherein the peripheral wall portion includes a thin-shaped deformed portion that is defined by a groove formed in the outer end face of the peripheral wall portion,*
- wherein the deformed portion is inclined and curved inwardly toward the step portion such that an inner surface of the deformed portion is formed in a concave shape and an outer surface of the deformed portion is formed in a convex shape,
- wherein the deformed portion is positioned axially within the outer end face of the peripheral wall portion, and
- wherein the inner surface of the deformed portion abuts the second member.

Similarly, as amended herein, claim 2 (*i.e.*, the claim from which claims 3 and 4 depend) recites a connecting structure of a pipe connected to a passage formed in a member. This connecting structure includes, among other possible things (*italic and underline emphasis added*):

- a projection portion that projects from the pipe radially outwardly;
- a recess portion that is provided at an open end of the passage formed in the member and that receives the projection portion of the pipe,

wherein the recess portion is defined by *a peripheral wall portion that includes a thin-shaped deformed portion that is defined by a groove formed in an outer end face of the peripheral wall portion,*

wherein the deformed portion is inclined and curved inwardly toward the recess portion such that an inner surface of the deformed portion is formed in a concave shape and an outer surface of the deformed portion is formed in a convex shape,

wherein the deformed portion is positioned axially within an outer end surface of the peripheral wall portion and is engaged with the projection portion, and

wherein the projection portion of the pipe, which is inserted into the opening end of the passage in the member, abuts the inner surface of the deformed portion.

For at least the following reasons, Gaitros fails to teach or suggest the connecting structures recited in claims 1 and 2.

In rejecting claims 1 and 2, the Examiner respectively analogizes Gaitros' fitting 1, large diameter portion 11, and trepan 8 to the first member/member, peripheral wall portion, and deformed portion recited in claims 1 and 2. Applicants respectfully disagree. As shown in Figure 1 of Gaitros, the deformed portion (trepan 8) is formed well within the first member/member (fitting 1). In contrast, claims 1 and 2 recite that the deformed portion is "defined by a groove formed in [an] outer end face of the peripheral wall portion." Accordingly, as Gaitros' deformed portion (trepan 8) is not "defined by a groove formed in the outer end face of the peripheral wall portion [(large diameter portion 11)]," Gaitros fails to teach or suggest at least the above-italicized limitation of claims 1 and 2.

For at least the foregoing reasons, Gaitros fails to teach or suggest each of the limitations of claims 1 and 2. As a result, Gaitros can not be used to reject claims 1 and 2, or any claim dependent thereon, under 35 U.S.C. § 102(b). Moreover, as claims 3 and 4 depend from claim 2, each of these dependent claims is also allowable Gaitros, without regard to the other patentable limitations recited therein. Accordingly, a withdrawal of the rejection of claims 1-4 under § 102(b) is both warranted and earnestly solicited.

B. Claims 16-19

As amended herein, claim 16 (*i.e.*, the claim from which claim 17 depends) recites a connecting structure. This connecting structure includes, among other possible things (*italic and underline emphasis added*):

a first member; and

a second member,

wherein the first member has a peripheral wall portion that includes an outer end face and a stepped portion engaged with the second member,

wherein the peripheral wall portion includes a thin-shaped deformed portion that is defined by a cutting groove formed in the outer end face and that is deformed inwardly with respect to the stepped portion of the first member,

wherein an outer face of the deformed portion is formed in a convex shape and an inner face of the deformed portion is engaged with the second member.

Similarly, as amended herein, claim 18 (*i.e.*, the claim from which claim 19 depends) recites a connecting structure of a pipe connected to a passage formed in a member. This connecting structure includes, among other possible things (italic and underline emphasis added):

a projection portion that projects from the pipe radially outwardly;
a recess portion that is provided at an open end of the passage formed in the member and that receives the projection portion of the pipe,

wherein the recess portion is defined by a peripheral wall portion that includes a thin-shaped deformed portion,

wherein the deformed portion: (a) is defined by a cutting groove formed in an outer end face of the peripheral wall portion at a distance from the recess portion, and (b) is deformed radially inward with respect to the recess portion, and

wherein an outer face of the deformed portion is formed in a convex shape and an inner face of the deformed portion is engaged with and abuts the projection portion.

For at least the following reasons, Wilson fails to teach or suggest the connecting structures recited in claims 16 and 18.

In rejecting claims 16 and 18, the Examiner respectively analogizes Wilson's end cap 16, deformed surface material 74, and lower surface 20 to the first member/member, deformed portion, and outer face recited in claims 16 and 18. Applicants respectfully disagree. As clearly shown in Figure 4 of Wilson, the deformed portion (deformed surface material 74) annularly projects from the outer face (lower surface 20) into a recess, *i.e.*, the deformed portion (deformed surface material 74) is essentially formed by a bore into the outer face (lower surface 20). In contrast, claims 16 and 18 recite that the deformed portion is "defined by a cutting groove formed in the outer end face" of the peripheral wall portion. Accordingly, as Wilson's deformed portion (deformed surface material 74) is not "defined by a cutting groove formed in the outer end face [(lower surface 20)]" of the peripheral wall portion, Wilson fails to teach or suggest at least the above-italicized limitation of claims 16 and 18.

For at least the foregoing reasons, Wilson fails to teach or suggest each of the limitations of claims 16 and 18. As a result, Wilson can not be used to reject claim 16, or any

claim dependent thereon, under 35 U.S.C. § 102(b). Moreover, as claim 17 depends from claim 16, and as claim 19 depends from claim 18, each of these dependent claims is also allowable Wilson, without regard to the other patentable limitations recited therein. Accordingly, a withdrawal of the rejection of claims 16-19 under § 102(b) is both warranted and earnestly solicited.

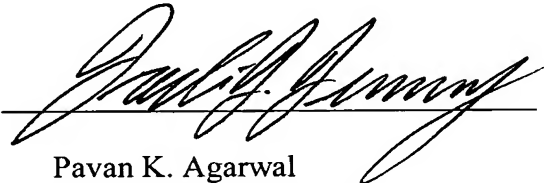
2. Conclusion

For the aforementioned reasons, claims 1-4 and 16-19 are now in condition for allowance. A Notice of Allowance at an early date is respectfully requested. The Examiner is invited to contact the undersigned if such communication would expedite the prosecution of the application.

Respectfully submitted,

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